

PHILMONT *Mobile* RADIO CLUB INC.

The BLURB

AREA
MEMBER

DECEMBER
1966

WANTED

TO BE ELECTED

FOR PRESIDENT
W3OWK



ALIAS AL

W3OWK is a man of many talents and is a true leader in the club.

FOR PRESIDENT
W3YHV



BALDY BILL

W3YHV is a man of many talents and is a true leader in the club.

FOR PRESIDENT
W3GIF



AMOUROUS AL

W3GIF is a man of many talents and is a true leader in the club.

FOR DIRECTOR
K3GNM



ANONYMOUS AL

K3GNM is a man of many talents and is a true leader in the club.

FOR TREASURER
WA2RDC



DAPPER DAVE

WA2RDC is a man of many talents and is a true leader in the club.

FOR TREASURER
WB2SZF



WILEY WAYNE

WB2SZF is a man of many talents and is a true leader in the club.

FOR SECRETARY
K3UWO



RAMBUNKIOUS
BOB

K3UWO is a man of many talents and is a true leader in the club.

FOR SECRETARY
K3WOC



DRILLER DOC

K3WOC is a man of many talents and is a true leader in the club.

WITH APOLOGY FROM CNI

The BLURB is published monthly by and for the members of the Phil-Mont Mobile Radio Club. Our purpose is to further the interest of amateur radio in general and mobile radio in particular. We endeavor to keep the news accurate, interesting, and educational. Copying and quoting is permitted, with a credit line, and we gladly exchange subscriptions with other clubs.

DEADLINE: All material must be in the hands of the Department Editor before the 15th, as the BLURB is mailed on the last Monday of each month.

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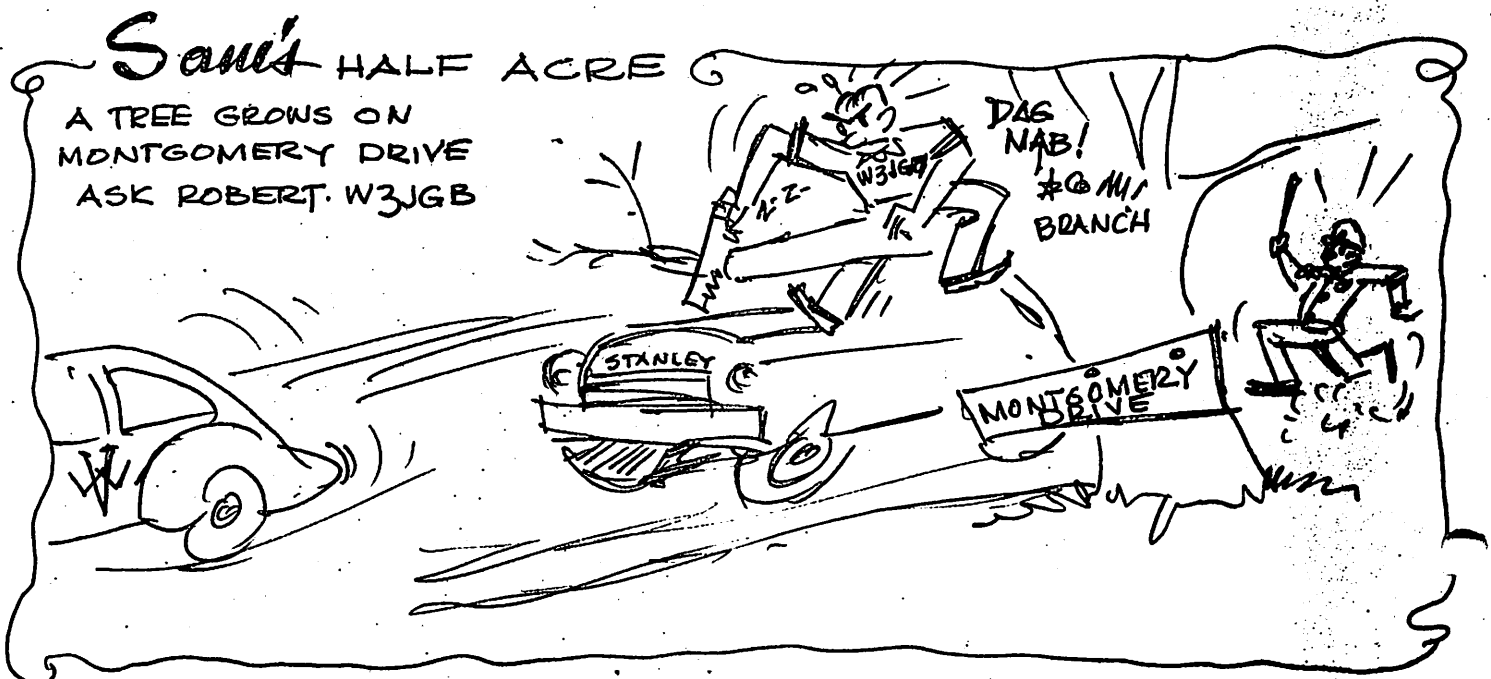
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Addresser W3VVS

W3TKQ - CLUB STATION

The Franklin Institute
Fredwood S. Shaw - Trustee
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Philadelphia, Pennsylvania 19103

CLUB NETS & FREQUENCIES

29.493mc - 10-on-10 Net Sundays
1000, monitored daily. 29.626mc
2nd Freq., 3993kc SSB 0730-0845,
50.70 and 52.525mc (FM) 147.78mc



THE PREZ SEZ

The Annual Phil-Mont Banquet turned out to be a fine affair. The room at the top of the Barclay was just right for our group, the food was fine, the service was good, the speeches not too long, and there were, of course, some fine door prizes. My congratulations to Jack Mahoney, W3DJW and Dick Klein, W3WXC for taking care of all the details for us. I add my thanks to their XYL's for their help, too, in making our affair a success.

We had the great pleasure of hearing from Lawrence, W3QCV, as one of our speakers. In his official role as President of the Franklin Institute, he told us that Phil Mont is to receive the President's Citation of the Franklin Institute for it's outstanding efforts in aiding the science-education program of the Institute. The actual presentation will be made at a Board of Manager's meeting, probably in January. More on this subject as the matter is firmed up. In any case, it is a great honor for our Phil-Mont Club, this being the fourth time that the President's Citation has been given to any person or organization.

Just a reminder that election time is here----- come out and vote on December 5th.

73's

Fred W3ADV

CALENDAR OF EVENTS

Regular Meeting-Election - Dec. 5th at Franklin Institute

Mid-Month Meeting - Dec. 14th - QTH W3WNC

ADDITION TO DIRECTORY

W3CDY - XYL - Elinore
2nd Home Tel. - KI-4-5864

IT SEEMS TO ME

Yes, it seems that I owe an expression of thanks to a few Phil-Monters, namely, W3AWH, K3HIE, W3QZO, & K3KUD for two issues. These fellows took time out of their busy life to give me time I needed so much. How much, I did not even know. It is to you guest editors that I am most grateful for a job well done.

Being busy is nothing new to a Phil-Monter. Everyone I talk to is busy, in his own way. So busy in fact, that it is hard to get someone to commit himself to run for office. I have pondered over, "this busy life" and I believe here-in lies the success of the Club. You have probably heard the statement "If you want a job well done ask a busy man." And so it goes, a new slate of candidates have consented to run for office and the elected ones committed their time to pilot PMRC for another year.

As chairman of the nominating committee and on the committee's behalf, may I thank all the candidates for allowing us to place their names on the slate for the various offices. So, at the December meeting we will again have a typical Phil-Mont Election. Don't miss it! You must be present to vote.

de W3CDY

MID-MONTH MEETING

The mid-month meeting was held at K3HIJ's. A hearty thanks to Joe and Miriam for a delightful evening.

Due to the absence of the banquet chairman, the state of the treasury, as far as the banquet is concerned, could not be determined. We hope for a rectification of this situation at the December meeting.

W3QQH reported that he had held some of our club equipment that we received when Frank Travers W3LNQ passed away early this year. The club now has enough money to purchase an SB100 Heath Transceiver for the Com-truck, which will be suitably marked as a memorial for Frank.

Lloyd, W3CDY will arrange to feed a description of our ham station operation at the Institute over the telephones associated with the station, for edification of our visitors. This will be done by means of a continuous tape. There was considerable discussion on making a new-film on Phil-Mont activities -- this will be discussed later.

THE BANQUET

The building directory listed the Phil Mong Mobile Radio Company - ?? 12th floor. No other signs of Phil-Mont, so to the 12th floor, and there was the Phil-Mont Mobile Radio Club about to hold their annual Banquet as scheduled.

To those of you who missed it, here is a short report on a big and most enjoyable evening.

Jack W3DJW, Committee Chairman, promised a beautiful view if the food failed to come up to expectations. Well, we had both, at least I heard no dissatisfaction expressed, but numerous favorable remarks.

The organ music started early, but the dancers were few thru the night. The prize drawings were slipped between program activities.

Lawrence W3QCV spoke briefly expressing his humble regrets that he is not more active in Phil-Mont's activities. He then proceeded to drop a surprise by announcing that Phil-Mont will receive the Franklin Institute's President's Citation as the Prez told you.

Fred W3ADV asked Mr. Robert Neathery, Director of the Museum to speak at our banquet. He had never joined us on such an occasion and it was indeed fitting to have him do so.

He likewise commented on Phil-Mont's contributions and added a few humorous and fitting stories.

This brought him to the subject of Serendipity, meaning "quite by accident." Many instances of accidental events are responsible for our progress in science, sports and weather. Mr. Neathery recounted some of them with names, places and dates to our pleasure. Recognizing these instances and discovering the reasons, for or why, by an individual, is what defines a scientist, he concluded. And in this he included the Amateur as well.

THE PRIZES

The prizes were tops and here is how it went.

First prize went to Eunice (XYL-W3VVS) and she took the TV set. Second prize went to W3DJW and you know there went the NCX5. The NCX5 was a 50/50 deal through the courtesy of Kass Electronics. After that we lost track of the prizes, but the winners went this-a-way - 3rd Doc W3EXY; 4th - WA3CFV Mike; 5th Peggy (XYL-W3DJW); 6th W3BV; 7th John W3AWH, 8th Mollie (XYL-W3AWH); 9th Fred W3DJV; 10th Lawrence W3QCV; 11th Bob K3UWO; 12th Elaine (XYL-W3DQH); 13th Allen K3GNM; 14th and last - Jim K3PHC.

AWARDS

Paul W3VVS, Chairman of the Awards Committee did his usual excellent job.

No LeRoy Hauser Memorial Award was made this year. The previous recipients who were present were recognized by Paul. This years Phil-Monter 1966 award went to W3WNC Hy Hecht for his many years of contributions. Hy is an ex-president and Blurb printer. He has served on many committees, most recently on the nominating committee. He is probably best remembered as our Auctioneer. Regretably, he was not present to receive the award due to the uncertainty of an out-of-town assignment.

Lady Phil-Mont 1966 went to Emma Shaw XYL- W3ADV for sharing the XYL's burden of a Phil-Mont President. Since the Trophy again failed to arrive on time, a certificate was presented in the interim.

The Idaubmug (id^o aub mug) 1966 Award went to W3YHV for his vallant performance of sleeping thru his turn as NCS for 10 on 10 net. Most deserving I should say. Sleeps purty too--

The Awards for 1966 are again behind us, but keep alert for those deserving for the year 1967, now near at hand.

A PHIL-MONTER HONORED

On November 2nd at a Luncheon at the Bellvue Stratford Hotel, here in the city, an award was made. Lawrence W3QCV, was chosen to receive the "Outstanding Citizen of the Year" award. This award is made by the Delaware Valley Council consisting of business and civic representatives of the Tri-State Delaware Valley area.

The citation on the Award reads "In recognition of his high ideals, principles and vision, and for his excellent leadership and outstanding service to the community." Lawrence, may we of Phil-Mont commend and congratulate you also.

A working model of a Portable Computer Terminal Unit is used at the U. of P. This unit is using many circuits basically and typically ham radio. There is a second generation model of this computer terminal unit being developed by K3HIJ & W3WXC.

NOVEMBER MEETING

The meeting was well attended and proved to be a full night. The nominations for the 1967 officers were received. The Banquet Committee report was heard and many tickets purchased as time was running out. W3OWK brought a Lafayette 10 meter rig for examination and gave a short report on it. W3YHV ran some film on the Paddlerama and Field Day. W3QQH set up a 2m RTTY circuit with W3QV and gave a demonstration that proved interesting to many.

Electioneering for the office of president was announced for Nov. 27th and Dec. 4th at 8 p.m. on 29.493 mc. (Be on hand and join the fun.) Al W3GIF made his usual worthwhile and tasty contribution with coffee and donuts. The usual eye-ball QSO followed as many stayed to enjoy them.

Visitors at the November meeting were as follows:

Marge Kennedy K3FXP
John Moran
Louis Rulli
Louis S. Rulli

Hope you enjoyed your visit with us. It was our pleasure to have you and may you visit with us again soon.

MEMBERSHIP APPLICATION

Ben L. Schaefer WA3ATP
7649 Malvern Ave. Phila., Pa. 19151
Handle: Ben, XYL - Isobel H - GR-7-5345

Ben is known to many as the store manager for Kass Electronics on Township Line Rd., Drexel Hill.
Tel. HI-9-2300 (The donor of the NCX5 prize)

And the sponsors --? W3AES & W3DJW

K3HIJ - Joe Elmaleh will present a paper on "Conversation with Computers and Sea Traffic Control" before the IEEE on March 29th in NYC. F B Joe and may it be well received.

Those pocket calendars for 1967 were printed and supplied by W3QZQ. Our thanks to you Bob.

NOMINATIONS

Nominations for the 1967 offices by the committee W3CDY, W3DSG, W3JGB, W3QQH, & W3WNC.

PRESIDENT:

W3GIF Al Hamilton

W3OWK Al Jorett

W3YHV Bill Bubeck

SECRETARY:

K3UWO Bob Mynster

K3WOC Doc Creamer

TREASURER:

WA2RDC Dave Anderson

WB2SZF Wayne Ziegler

DIRECTOR:

K3GNM Allen Bubeck

K3OEJ Art Garner

W3QZO Bob Thomas (Nominated from the floor)

This is your slate of candidates for 1967. December 5th, the next meeting is the time of our elections. REMEMBER - you must be there to vote!

SWAP AND SHOP

For Sale: 1- RCA CMV-2 6v dc unconverted but
with xtals for 52.525 \$37.00

1- RCA CMV-2 12v dc unconverted but
with xtals for 52.525 \$42.00

MO Rabson - CA-4-1011

For Sale: Heath HW-12 Transceiver with xtal cal-
ibrator and HP-13DC pwr supply, cables
and microphone.

Hen Schaefer, W3GSU - 367-5731

For Sale: DX-100 with built in T/R switch, time
sequence keying.

BC 779, military version of Hammerlund
Super-Pro with calibrator.

George VanTine, K3RWK, 302 - SY-8-8898

For Sale: RME VHF 152 A converter for 10,6,2 mtrs.
7 mc output.

DX 35 transmitter needs power transformer.

Mel Toren, W3IWO - TR-7-1536

SEASONS GREETINGS AND A HAPPY 1967

de The Staff

TECHNIGRAM

Transistors for Hams - Part VI - Bob Thomas W3QZO

Last month consideration was given to signal voltages and currents in a transistor amplifier. If we expect to obtain a reasonably large and undistorted signal from an amplifier it becomes necessary to provide a steady d-c current through the transistor upon which to superimpose the signal. The steady d-c is called bias; it positions the signal in the operating range of the amplifying device for optimum performance. Before describing how to select bias, a few terms should be explained.

First, there is an operating limit called cutoff. This is a special case in an amplifier when no current, either signal current or bias current, is flowing. Fig. 1 shows this condition. Another limit, illustrated by Fig. 2, is called saturation. A transistor is said to be "saturated" when it cannot possibly draw any more current, regardless of bias or signal. A saturated transistor appears like a short circuit between collector and emitter so the current through it must be limited by some external resistance; if you don't have a load resistance, the transistor will destroy either itself or the power supply, or (sob) both. These two extremes of operation, cutoff and saturation, make the transistor look like a switch that is either open or closed, but while this type of operation is great for mobile power supplies or electronic ignition systems, they are to be avoided in linear amplifiers. In fact they define the limits of operation of an amplifier. What we want is a d-c bias that insures that the signal will never drive the transistor to either cutoff or saturation. In politics a person who places himself

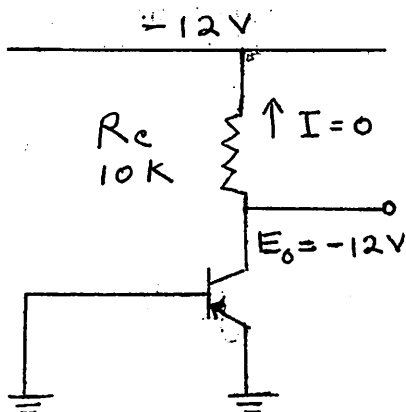


Fig. 1- Cutoff

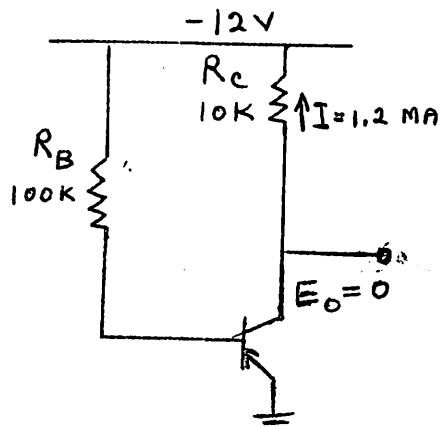


Fig. 2 - Saturation

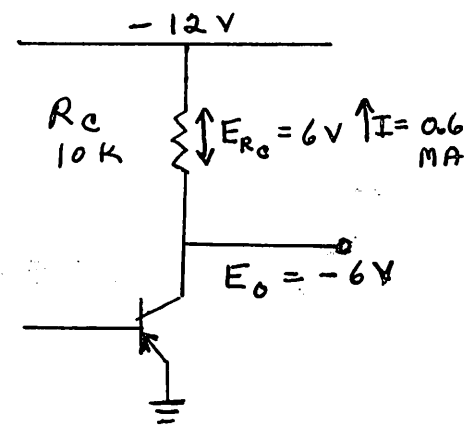


Fig. 3

(continued on next page)

between two extremes is called a "middle-of-the-roader", and the same technique is used in amplifier biasing. Fig. 1, the cutoff condition shows that the entire supply voltage is across the transistor with no drop across the collector resistor, while Fig. 2 illustrates that in saturation no voltage appears across the transistor - it is entirely across the resistor because a saturated transistor acts like a short circuit. To be an electronic "middle-of-the-roader" all we have to do is bias the transistor so that approximately one half the supply voltage is dropped across the collector resistor, with the other half across the transistor. This is the condition, depicted in Fig. 3, when there is no signal present; it is called the quiescent condition, and all voltages and currents existing in the circuit establish the operating point of the amplifier. When a signal is fed into the amplifier the collector voltage swings about the operating point in accordance with the signal waveform as shown in Fig. 4, where it may also be seen that the maximum signal level that can be handled is equal to the supply voltage, or 12 volts peak-to-peak in this case. Any attempt to obtain a larger output

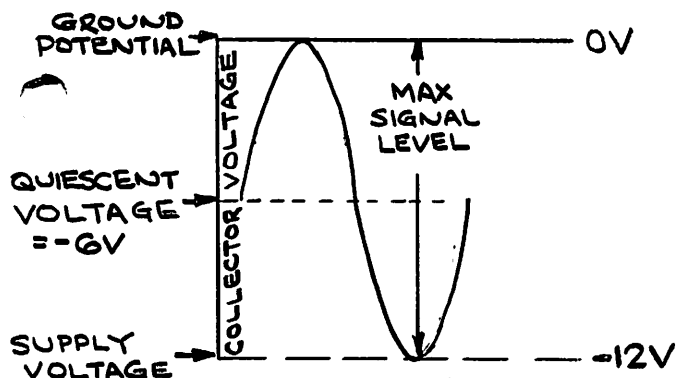


FIGURE 4

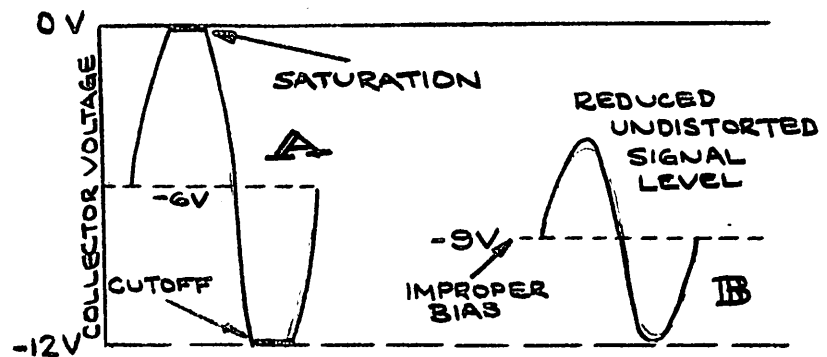


FIGURE 5

by overdriving the amplifier will result in clipping due to cutoff or saturation as shown in Fig. 5A. Furthermore, the 12 volt signal output can only be realized if the proper bias has been selected. Fig. 5B shows the reduction in dynamic range (signal-handling capability) resulting from incorrect bias conditions.

The foregoing description should supply the basis for determining correct d-c bias in an amplifier. Next month we will put the fundamentals in action to complete our amplifier design example.

C. R. Spencer Jr. W300H
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